1993 SURVEY REPORT

APPLE ERMINE MOTH (<u>Yponomeuta malinellus</u> Zeller) - This detection survey was conducted under a grant from the USDA. All of the commercial apple growing areas of the state were surveyed, as well as a limited number of abandoned and backyard apple trees in the remainder of the state. Trap sites were selected at each inspector's discretion based upon risk, accessibility, and presence of suitable host material. There were approximately 156 traps placed in 26 counties across the state. Placement ranged from one to seventeen in a given county. No moths were detected. This program will be repeated in 1994. This moth has been known to be in the city of Spokane, Washington for the past few years. Spokane is located approximately 20 miles from the Idaho border.

APPLE MAGGOT (<u>Rhagoletis pomonella</u> (Walsh)) - A total of 180 traps were placed prior to July 1 near orchards or native hawthorn in Canyon, Gem, Payette, Owyhee and Washington Counties of Idaho. The only positive catches were in Gem and Boise counties, and those were all in native hawthorn. No catches were made in or near commercial apple orchards.

BEET NECROTIC YELLOW VEIN VIRUS (Rhizomania) - Rhizomania was detected for the first time in Rupert (Minidoka County), Idaho, in June, 1992. The zone of rhizomania infestation is in a circle with a 3-1/2 mile radius (includes a one mile buffer zone beyond the outermost known rhizomania infested field). No new detections were made outside of the zone in 1993, however, 52 new fields for a total of 79 fields within the zone were found to be positive based on field surveys. Aerial surveys of the area proved to be a very effective tool in the detection of positive fields. There were 23 fields found to be infested based on soil samples. Beet seedlings were grown in the suspect soil and then tested for rhizomania.

CEREAL LEAF BEETLE (<u>Oulema melanopus</u>) - Active infestations of the cereal leaf beetle were detected for the first time in 1992 in Franklin County south of Preston in southeastern Idaho. Surveys in 1993 of 234 wheat and barley fields in 43 counties in the state have been negative. A minimum for 4 to 5 fields per county were surveyed. Egg parasite releases of <u>Anaphes flavipes</u> were made in June of 1993. In addition, the USDA CLB lab at Niles, MI detected the presence of <u>Tetrastichus julis</u> in CLB larvae collected and sent to Niles for rearing purposes. The nearest releases of this parasite were near Salt Lake City, UT in the mid-1980's and one release in 1992. These sites are almost 100 miles from the Idaho border.

CHERRY FRUIT FLY (Rhagoletis cingulata (Loew)) - Traps were set at previously used sites around the perimeter of the cherry production area. Traps were set to detect first emergence and trigger mandatory spray programs per Idaho's Rules and Regulations for Control of Cherry Fruit Fly; and to partially satisfy requirements to ship non-fumigated cherries to California. Sixteen traps were set on May 13, 1993 and removed on June 18, 1993. First emergence was detected on June 18, 1993. This was almost three weeks later than normal.

EUROPEAN PINE SHOOT MOTH (<u>Rhyacionia buoliana</u> (Denis & Schiffermüller)) - Limited infestations are known to exist in Nez Perce, Ada, and Kootenai Counties as determined by surveys performed over the past few years. In 1993 detection surveys were carried out in southern Idaho. Trap sites were selected at each inspector's discretion based upon risk, accessibility, and presence of suitable host material. There were 104 traps placed in 24 counties. A new single positive site was found in Canyon County.

GYPSY MOTH (Lymantria dispar (Linnaeus)) - The Idaho gypsy moth detection survey program systematically samples all populated areas of the state in order to detect introductions of gypsy moths. Many US Forest Service campgrounds are also sampled, as well as rest stops, tourist attraction sites and many other locations where people congregate. High risk areas, those cities with the highest populations and the highest potential for newly arriving families, are trapped each year. Other areas are trapped every other year or every third year. The survey will continue to expand as the rural/urban interface develops and more people move into the rural areas of the state.

DETECTION TRAPPING: The Idaho Department of Lands, the Idaho Department of Agriculture and the U.S. Forest Service Regions 1 and 4, with participation from APHIS, cooperatively placed approximately 4420 pheromone baited traps throughout the state in 1993. Our target density for these detection traps is 4 traps per square mile. Added emphasis is given to cities, towns and rural areas where a sufficient number of new families moved in to generate an increased risk of introduction of gypsy moths. Tracking of these new "move-ins" is provided in a report compiled by the Idaho Department of Transportation showing the locations of people moving to Idaho from gypsy moth infested states. The report, derived from applications for vehicle title transfers, indicates that approximately 250 individuals or families move to Idaho each month from the generally infested states of the Northeast including Virginia, West Virginia and Wisconsin. Utah has now been dropped from our list.

Two gypsy moths were caught in Idaho in 1993, both in one trap on the east side of Coeur d'Alene, Kootenai County. The area has no residences, but does have several motels and RV Parks in the vicinity. This areas will be intensively trapped in 1994.

Regularly scheduled detection trapping will continue through out the state in 1994. Additional high risk areas to be trapped will be determined using the above mentioned Department of Transportation report.

DELIMITATION TRAPPINGS: Delimitation trapping at 36 traps per square mile was done in the areas surrounding three 1992 detection catch sites. The 1992 traps caught three moths in widely separated areas of the state, one at Pinehurst, Shoshone County 30 miles east of Coeur d'Alene, on at Filer, Twin Falls County in south-central Idaho and one near the eastern edge of the state at Shelly, Bingham County. The Pinehurst site had a single moth in both 1991 and 1992. No moths were caught at these three sites in 1993.

PREVIOUS INFESTATIONS: Eradication of previous infestations of gypsy moths in Sandpoint, Bonner County and in Coeur d'Alene, Kootenai County, has now been confirmed for four years. No moths were caught in the areas of concern in 1990, 1991, 1992, or 1993 after treatments in 1989 and 1990 with <u>Bacillus thuringiensis</u>.

STATE ADVISORY COMMITTEE: An advisory committee, composed of representatives from the above mentioned agencies and the University of Idaho, provides guidelines for the gypsy moth program in Idaho.

JAPANESE BEETLE (<u>Popillia japonica</u> Newman) - The trapping program was expanded over last summer's program. Traps were placed at many of the larger nurseries across the state that were known to handle large quantities of container and/or balled and burlap nursery stock, as well as recently landscaped properties, such as commercial office parks, golf courses, and apartment complexes.

There were 102 traps were placed in 27 counties state wide. Traps were placed the last week of June and picked up during the last week of September or first week in October. All traps were checked every two weeks. Trapping was carried out on a site selection basis by Plant Industry inspectors with emphasis being placed on nurseries, golf courses, offices parks, landfills, and apartment complexes.

One Japanese beetle was caught at a Boise nursery. No feeding signs were found on any plant material in the nursery or adjacent grounds. This catch is believed to be due to some reproduction from beetles caught at this nursery last summer. The nursery was treated with both granular and liquid insecticide under state supervision.

MEXICAN BEAN BEETLE (Epilachna varivestis (Mulsant)) - Two areas in Boise continue to be surveyed. A total of 5,521 homes were visited and 1,381 gardens were inspected. Only one infested garden (a single egg mass) was found this year as compared to 36 last year. The parasitic wasp Pediobius foveolatus was released weekly in areas of observed beetle infestation. Ten thousand wasps were released each week from July 29 to August 26. Parasite releases are used to augment any chemical treatment of infested gardens, in that the parasites will help to control larvae feeding on wild or undetected hosts in the vicinity of infested gardens.

ORIENTAL FRUIT MOTH (<u>Grapholita molesta</u> (Busck) - Was found to only be present in under managed stonefruit orchards or yard trees. There were 66 traps were placed in 21 counties.

EUROPEAN CORN BORER (Ostrinia nubilalis (Hubner) - Was surveyed for in support of the states' quarantine against this pest. There were 83 pheromone traps placed in 22 counties. Traps were placed in corn fields and near feed lots and grain elevators known to import corn from the mid-west. The survey was negative. Prepared by: Michael E. Cooper, Chief, Bureau of Feeds and Plant Services